<center>**REMARKS/ARGUMENTS**</center>

In the Office Action mailed January 2, 2009, claims 1-10 are rejected. Additionally, the drawings are objected to. In response, claims 1, 5, 6, 8, and 10 have been amended and new claims 11-13 have been added. Applicants hereby request reconsideration of the application in view of the claim amendments, the new claims, and the below-provided remarks.

Objections to the Drawings

The Office Action states that elements in Figures 3 and 4 should be provided with descriptive text labels. The current application is a U.S. National Stage application. The labeling of figures with text matter is prohibited, except when absolutely indispensible for understanding (see PCT Rule 11.11). Further, MPEP 1893.03(f) states that "[t]he USPTO may not impose requirements beyond those imposed by the Patent Cooperation Treaty (e.g., PCT Rule 11)." Additionally, the elements in Figures 3 and 4 are labeled with reference numbers and are described in Applicants' specification. Thus, descriptive text labels for the elements in Figures 3 and 4 are not absolutely indispensible for understanding. In view of the above, Applicants respectfully assert that descriptive text labels for the elements in Figures 3 and 4 are not required in the current application.

The Office Action also states that Figure 1 should be designated by a legend, such as "Prior Art." Again, the current application is a U.S. National Stage application. The drawing requirements for U.S. National Stage applications are identified in MPEP 1825 and labeling of figures as "Prior Art" is not required (see PCT Rule 11.11). Because the USPTO may not impose requirements beyond those imposed by the Patent Cooperation Treaty, Applicants respectfully assert that labeling Figure 1 as "Prior Art" is not required in the current application.

As a result, Applicants respectfully request that the objections to the drawings be withdrawn.

Claim Rejections under 35 U.S.C. 103

Claims 1-4 and 6-10 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Ro et al. (U.S. Pat. No. 7,283,498, hereafter "Ro") in view of Shirakata

et al. (U.S. Pat. No. 6,618,352, hereafter "Shirakata"). Claim 5 is rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Ro in view of Shirakata and further in view of Cho et al. (U.S. Pat. Pub. No. 2002/0004920, hereafter "Cho"). Applicants respectfully submit that the pending claims are patentable over the cited references for the reasons provided below.

Independent Claim 1

Claim 1 has been amended to correct an informality. In the Office Action, Ro is cited for teaching all of the limitations of original claim 1 except the limitation related to the correction unit. Shirakata is cited for teaching a correction unit.

Applicants respectfully assert that Ro fails to teach all of the limitations of the quality determination unit. In particular, Ro fails to teach that pilot carriers, which fulfill a predetermined quality criterion are "_training pilot carriers_" (emphasis added), as recited in claim 1. Ro teaches that the number of pilot carriers to be allocated to a sub-channel of a subscriber is determined by comparing a bit error rate (BER), which is estimated using the pilot carriers in the sub-channel, with a threshold, see column 4, lines 23-32, column 3, lines 59 and 60, and the paragraph between column 3, line 66 and column 4, line 2. However, Ro fails to teach that the pilot carriers, which are used to estimate the BER, carry a _training_ symbol. Because the pilot carriers do not carry a training symbol, the pilot carriers of Ro cannot be considered training pilot carriers. Therefore, Ro fails to teach that the pilot carriers, which are used to estimate the BER are "_training pilot carriers_" (emphasis added), as recited in claim 1.

Additionally, Applicants respectfully assert that Ro fails to teach all of the limitations of the control unit. In particular, Ro fails to teach "_supplying the control signal (CEC) being dependent on an amplitude and/or phase of data pilot carriers (PC) of which corresponding training pilot carriers (TRPC) fulfill the predetermined quality criterion_" (emphasis added), as recited in claim 1. As described above, Ro teaches comparing a BER, which is estimated using pilot carriers in a sub-channel, with a threshold. However, Ro fails to teach that the pilot carriers, which are used to estimate the BER, carry a _training_ symbol. Because the pilot carriers do not carry a training symbol, the pilot carriers of Ro cannot be considered training pilot carriers. Therefore,

Ro fails to teach that the pilot carriers, which are used to estimate the BER, are *"training pilot carriers"* (emphasis added), as recited in claim 1. Because Ro fails to teach that the pilot carriers, which are used to estimate the BER, are training pilot carriers, Ro fails to teach that *"training pilot carriers (TRPC) fulfill the predetermined quality criterion"* (emphasis added), as recited in claim 1. Additionally, Ro fails to teach that the pilot carriers, which are used to estimate the BER, correspond to data pilot carriers that carry data symbols and Ro fails to teach that a control signal is supplied dependent on an amplitude and/or phase of the data pilot carriers.

Accordingly, Applicants respectfully assert that Ro in view of Shirakata fails to teach all of the limitations of claim 1. Thus, Applicants respectfully assert that claim 1 is patentable over Ro in view of Shirakata.

Dependent Claims 2-7, 9, and 10

Claims 2, 5, 6, and 10 have been amended to correct informalities. Claims 2-7, 9, and 10 depend from and incorporate all of the limitations of the independent claim 1. Thus, Applicants respectfully assert that claims 2-7, 9, and 10 are allowable at least based on an allowable claim 1. Additionally, claims 2 and 5 may be allowable for further reasons, as described below.

Applicants respectfully assert that Shirakata fails to teach *"averaging the amplitude and/or phase of the data pilot carriers,"* as recited in claim 2. Shirakata teaches that an amount of phase change between two pilot carriers is calculated in order between pilot carriers in a symbol and the average value is obtained, see column 17, lines 25-33. That is, the average value of phrase changes between pilot carriers in a symbol is obtained. However, Shirakata fails to teach that average values of amplitudes or phrases of pilot carriers are obtained.

Applicants respectfully assert that Cho fails to teach *"comparing an amplitude of each of the training pilot carriers (TRPC) with a reference amplitude (RA)"* (emphasis added), as recited in claim 5. Cho teaches a BER operator for comparing a demodulated pilot pattern with a reference pilot pattern, detecting and accumulating the number of pilot errors, and measuring a bit error rate by dividing the accumulated number of the pilot errors by the number of total received pilot patterns, see paragraph [0011].

However, Cho fails to teach that the BER operator compares a demodulated <u>training</u> pilot carrier pattern with a reference pilot pattern. Additionally, Cho also fails to teach that the BER operator compares an <u>amplitude</u> of a pilot carrier with a reference amplitude.

Independent Claim 8

Claim 8 has been amended to correct an informality. Claim 8 includes similar limitations to claim 1. Because of the similarities between claim 1 and claim 8, Applicants respectfully assert that the remarks provided above with regard to claim 1 apply also to claim 8. Accordingly, Applicants respectfully assert that claim 8 is patentable over Ro in view of Shirakata.

New Claims 11-13

New claims 11-13 have been added. Support for claims 11 and 13 is found in Applicants' specification at, for example, original claim 1 and page 11, lines 5-10. Support for claim 12 is found in Applicants' specification at, for example, original claim 1.

Claim 12 includes all of limitations to claim 1 except that the phrase "a common amplitude error and/or common phase error" in claim 1 has been replaced by a phrase "a common amplitude error" in claim 12. Because of the similarities between claim 1 and claim 12, Applicants respectfully assert that the remarks provided above with regard to claim 1 apply also to claim 12. Accordingly, Applicants respectfully assert that claim 12 is patentable over Ro in view of Shirakata. Additionally, claim 12 may be allowable for further reasons, as described below.

Applicants respectfully assert that Shirakata fails to teach all of the limitations of the correction unit. In particular, Shirakata fails to teach "data carriers (DC) being corrected for a common <u>amplitude</u> error" (emphasis added), as recited in claim 12. Shirakata teaches that a data carrier phase correcting unit (9) corrects a <u>phase</u> error of a subcarrier, see Fig. 1 and column 15, lines 33-42. However, Shirakata fails to teach that the data carrier phase correcting unit (9) corrects an <u>amplitude</u> error of a subcarrier.

Claims 11 and 13 depends from and incorporates all of the limitations of the independent claims 1 and 12 respectively. Thus, Applicants respectfully assert that

claims 11 and 13 are allowable at least based on allowable claims 1 and 12 respectively. Additionally, claims 11 and 13 recite in part that "*a data pilot carrier and the corresponding training pilot carrier of the data pilot carrier have the same carrier frequency.*" Applicants respectfully assert that the cited references, either alone or combined, fail to teach the above-identified limitation of claims 11 and 13.

CONCLUSION

Applicants respectfully request reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-4019** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-4019** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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